

Listing of Claims:

Claims 1-9 (Canceled).

10. (Currently Amended) A laser microscope which irradiates a sample with a laser light ~~that includes a plurality of including lines of different~~ emission wavelengths through an objective lens, and which detects a fluorescent light emitted from the sample, said laser microscope comprising:

an optical fiber configured to guide said laser light;

a collimator lens configured to collimate said laser light guided by the optical fiber;

a beam splitter configured to split a part of said laser light collimated by the collimator lens;

a spectral resolution section configured to spectrally resolve said laser light split by the beam splitter into the lines of different emission wavelengths;

a converging lens configured to converge the ~~laser light spectrally resolved by the spectral resolution section lines of different emission wavelengths~~;

a light receiving element array configured to simultaneously receive the lines of different emission wavelengths the laser light converged by the converging lens; and

a controller configured to receive an output signal of the light receiving element array and to control respective

intensities of the lines of different emission wavelengths
included in said laser light to be constant for each of said
emission wavelengths.

11. (Previously Presented) The laser microscope according to claim 10, wherein said collimator lens, said beam splitter, said spectral resolution section, said converging lens, and said light receiving element array are formed in one block, and the block is attachable to and detachable from a main body of said laser microscope.

12. (Currently Amended) A laser microscope which irradiates a sample with a laser light ~~that includes a plurality of~~
including lines of different emission wavelengths through an objective lens, and which detects a fluorescent light emitted 5 from the sample, said laser microscope comprising:

a spectral resolution section configured to spectrally resolve said laser light into the lines of different emission wavelengths;

10 a light receiving element array that includes a plurality of light receiving elements configured to simultaneously receive ~~said laser light spectrally resolved by the spectral resolution section~~ the lines of different emission wavelengths such that each emission wavelength of said spectrally-resolved laser light

is respectively received by one of said light receiving elements;
15 and

a controller that is configured to receive an output signal
of the light receiving element array and to control ~~said laser~~
~~light for each of said emission wavelengths respective light~~
~~intensities of the lines of different emission wavelengths to be~~
20 constant.

13. (Previously Presented) The laser microscope according to
claim 12, wherein said spectral resolution section comprises one
of a prism, a diffraction grating, and a beam splitter.

14. (Previously Presented) The laser microscope according to
claim 12, wherein said light receiving element array comprises
one of a split photodiode and a solid-state image sensing device.

15. (Previously Presented) The laser microscope according to
claim 12, further comprising an optical fiber for guiding said
laser light into a main body of the laser microscope.

16. (Previously Presented) The laser microscope according to
claim 12, further comprising an optical fiber for guiding said
laser light into a main body of the laser microscope, and wherein
said spectral resolution section and said light receiving element

array are disposed on a light emission side of said optical fiber.

17. (Currently Amended) The laser microscope according to claim 12, wherein said controller receives the output signal of said light receiving element array and simultaneously controls the respective light intensities of the plurality of the lines of different emission wavelengths of included in said laser light to be constant.

18. (Currently Amended) The laser microscope according to claim 12, wherein said controller comprises:

a control unit configured to receive the output signal of said light receiving element array and to output a control signal for simultaneously setting the respective light intensities of the plurality of lines of different emission wavelengths of included in said laser light to be constant; and

an acousto-optical element, disposed on an optical path of said laser light, configured to receive said control signal output by said control unit and to set the respective light intensities of the plurality of lines of different emission wavelengths of included in said laser light to be constant.

19. (Currently Amended) The laser microscope according to claim 12, wherein a converging lens is disposed between said spectral resolution section and said light receiving element array, and said converging lens is configured to converge the ~~spectrally resolved laser lights~~ lines of different emission wavelengths on said light receiving element array ~~for the respective emission wavelengths~~.

20. (Previously Presented) The laser microscope according to claim 12, further comprising a beam splitter configured to split said laser light and guide a part of said laser light to the spectral resolution section.

21. (Currently Amended) A laser microscope which irradiates a sample with a laser light ~~that includes a plurality of~~ including lines of different emission wavelengths through an objective lens, and which detects a fluorescent light emitted from the sample, said laser microscope comprising:

a spectral resolution section configured to spectrally resolve said laser light into the lines of different emission wavelengths;

10 a light receiving element array configured to simultaneously receive ~~said laser light spectrally resolved by the spectral resolution section~~ the lines of different emission wavelengths;

a controller configured to receive an output signal of the light receiving element array and to control ~~said laser light for each of said~~ respective intensities of the lines of different 15 emission wavelengths to be constant; and

a beam splitter configured to split said laser light and guide a part of said laser light to the spectral resolution section;

wherein the spectral resolution section comprises one of a 20 prism, a diffraction grating and a beam splitter.

22. (Previously Presented) The laser microscope according to claim 21, wherein said light receiving element array comprises one of a split photodiode and a solid-state image sensing device.

23. (Previously Presented) The laser microscope according to claim 21, further comprising an optical fiber for guiding said laser light into a main body of the laser microscope.

24. (Previously Presented) The laser microscope according to claim 21, further comprising an optical fiber for guiding said laser light into a main body of the laser microscope, and wherein said spectral resolution section and said light receiving element array are disposed on a light emission side of said optical fiber. 5

25. (Currently Amended) The laser microscope according to claim 21, wherein said controller receives the output signal of said light receiving element array and simultaneously controls the respective light intensities of the plurality of lines of different emission wavelengths of included in said laser light to be constant.

26. (Currently Amended) The laser microscope according to claim 21, wherein said controller comprises:

a control unit configured to receive the output signal of said light receiving element array and to output a control signal for simultaneously setting the respective light intensities of the plurality of lines of different emission wavelengths of included in said laser light to be constant; and

an acousto-optical element, disposed on an optical path of said laser light, configured to receive said control signal output by said control unit and to set the respective light intensities of the plurality of lines of different emission wavelengths of included in said laser light to be constant.

27. (Currently Amended) The laser microscope according to
claim 21, wherein a converging lens is disposed between said
spectral resolution section and said light receiving element
array, and said converging lens is configured to converge the
5 ~~spectrally resolved laser lights~~ lines of different emission
wavelengths on said light receiving element array ~~for the~~
~~respective emission wavelengths.~~